

REMARKS/ARGUMENTS

Reexamination and reconsideration of this Application, withdrawal of the rejections, and formal notification of the allowability of all claims as now presented are earnestly solicited in light of the above amendments and remarks that follow. Claims 4, 8, 9, 12-14, 20, 21, 24-27, and 33-45 are pending in the application. Claim 27 is amended herein to remove some of the amendments made in the last response, and to recite that the first and second sections of filter material are formed of fibrous tow, including both portions of the first section of filter material. In addition, claim 27 has been amended to recite that the first section of fibrous tow filter material, the compartment, and the second section of fibrous tow filter material are circumscribed by a plug wrap, which is circumscribed by a tipping material that circumscribes the entire length of the filter element and attaches the filter element to the tobacco rod. In light of the changes to claim 27, claim 3 has been cancelled without prejudice or disclaimer and minor amendments have been made to claims 4 and 42. Support for the above amendments can be found, for example, on pages 7, 20, 21, and 24, as well as in Fig. 10. Applicants respectfully submit that no new matter is introduced by these amendments.

Applicants appreciate the time and attention of the Examiner during a telephonic interview on May 5, 2009. During the interview, Applicants' representative discussed the changes to claim 27 set forth above and argued that the cited art fails to teach or suggest such a filter arrangement. In particular, Applicants' representative noted that the cited Smith patent only teaches a disposable, removable filter attachment containing a capsule. Further, the undersigned noted that Irby, Jr. does not teach a two-part filter configuration with an outer annular component and an inner component defining a compartment as claimed, and only suggests the Fig. 2 configuration for expandable sponge-type filter segments. The Examiner indicated that the proposed claim amendments will require reevaluation of rejections and/or a new search.

All claims stand rejected as failing to comply with the written description requirement. Specifically, the Examiner alleges that the recitation regarding the capsule and the first section of filter material being free of adsorbent is not disclosed in the specification. Applicants disagree,

but since the language noted by the Examiner has been removed, the rejection is now moot. Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection.

All claims of record have been rejected as obvious over a combination of U.S. Patent No. 3,251,365 to Keith II *et al.* in view of U.S. Patent No. 3,390,686 to Irby, Jr. *et al.* and U.S. Patent No. 5,724,997 to Smith. With respect to claim 12, the above-noted references are combined with U.S. Patent No. 5,714,126 to Frund. With respect to claims 41-44, the above-noted references are combined with U.S. Patent No. 5,979,459 to Schneider. The Examiner continues to rely upon Keith II as describing use of a filter including two filter plugs and a cavity therebetween comprising an adsorbent. The newly-cited Smith patent is relied upon as teaching a disposable filter containing a frangible capsule within a fibrous tow filter element, although the Examiner admits that the two-part construction of the first section of filter material as presently claimed is not taught in Smith. The Irby, Jr. reference is relied upon as allegedly disclosing a breakable capsule within a filter section comprising an outer annular filter material and an inner filter material. The Examiner concludes it would have been obvious to modify the teachings of Keith II by adding the disposable filter of Smith, which can be modified as taught by Irby, Jr. Applicants respectfully traverse all rejections.

To establish a *prima facie* case of obviousness, according to a test predominately used by the courts, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim elements. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

With regard to the Supreme Court's decision in *KSR Int'l. Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007), it is noted that the Court did not dismiss the usefulness the well-established "teaching, suggestion, or motivation" test set forth above, but merely cautioned against its rigid application. The Supreme Court in *KSR* commented that the Federal Circuit "no

doubt has applied the test in accord with these principles [set forth in *KSR*] in many cases.” *Id.* 82 USPQ2d at 1396. However, the Supreme Court also opined that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results. . .” *Id.* 82 USPQ2d at 1395-96. Regardless of the precise test used, the Court, quoting *In re Kahn*, cautioned that “‘[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.’” *Id.* 82 USPQ2d at 1396.

As an initial point, Applicants note that the Smith reference only teaches embodiments of a disposable, removable filter attachment containing a capsule. There is no direction to use a capsule in a permanently-attached filter tow circumscribed by a tipping paper that connects the filter element to a tobacco rod as now presented in claim 27. For at least this reason, Applicants respectfully request reconsideration and withdrawal of all rejections relying upon the Smith patent.

In addition, contrary to allegations made on the office action, Fig. 2 of Irby, Jr. does not teach a two-part filter configuration with an outer annular component and an inner component defining a compartment as claimed. The Fig. 2 embodiment is merely an annular component. There is no second inner component taught or described in the reference. Note that no inner component is labeled in Fig. 2 or described in column 4 of the patent. Instead, the reference clearly only describes an annular component. For this further reason, Applicants respectfully request reconsideration and withdrawal of all rejections based on the Irby, Jr. reference.

Still further, the Irby, Jr. reference only suggests the Fig. 2 configuration relied upon in the rejection for expandable sponge-type filter segments. The reference clearly requires the use of a sponge that will expand to fill the cavity when the capsule is broken. The reference specifically notes that the Fig. 2 configuration is strictly for sponge-type filter materials because such materials can expand to fill the void when the capsule is ruptured. See column 4, lines 6-13. The claimed invention has been clarified to recite the use of fibrous tow filter materials. Thus, not only does Irby, Jr. fail to teach or suggest a two-part filter segment arrangement as presently claimed, the Fig. 2 embodiment is also limited to sponge-type filter materials, not the

presently-claimed fibrous tow materials. For this additional reason, Applicants respectfully request reconsideration and withdrawal of these rejections.

Applicants also note that a number of the dependent claims are separately patentable over the cited art. For example, claim 45 recites that one or both ends of the central portion of the first section of filter material are crimped. The Examiner refers to column 4 of the Irby, Jr. patent and states that the patent teaches the use of crimped paper with capsules. However, as noted above, the central portion of the first section of filter material is now claimed as a fibrous tow. There is nothing in Irby, Jr. suggesting a filter configuration involving crimping of a fibrous tow. The portion of the text mentioned by the Examiner merely refers to crimping a paper material and has no bearing on the embodiment of Fig. 2 of Irby, Jr. or any embodiment with fibrous tow filter materials. There is certainly no mention of crimping a central portion of a fibrous tow filter in any embodiment of Irby, Jr. For at least this additional reason, Applicants respectfully request reconsideration and withdrawal of this rejection as applied to claim 45.

Applicants also specifically traverse the rejections relying upon a combination of Keith II and Irby, Jr. with the Schneider patent. The Schneider reference teaches four different filter configurations set forth in Table 1 (column 2), but none of them would lead one to modify the filter of Keith II in order to arrive at the present invention. Note that the filter in Table 1 having a central chamber with “filtering material” (similar to the Keith II arrangement) has a mouth-end segment that is in the form of a coaxial filter, which is a solid filter segment with a solid central core and an outer jacket. Combining this teaching from Schneider with the other references of record will not result in the claimed invention, which includes a mouth-end filter segment that has a capsule therein.

The Schneider patent is directed to various filter embodiments including a coaxial filter segment. The patent teaches that the coaxial filter segment is designed to provide different flow characteristics depending upon whether ventilation holes are covered up during use. When the ventilation holes are unobstructed, the coaxial filter is configured such that smoke mainly enters the filter core and when the ventilation holes are covered, a major part of the smoke also travels through the filter jacket. The purpose of this design is to limit changes in smoke yield based on changes in ventilation. See column 1, lines 25-56. The two sections of the coaxial filter are

finely-tuned to provide, for example, a specific ratio of resistance to draw between the jacket and the central core and a specific resistance to draw value for the core. See column 2, lines 18-35.

In light of the teachings of the Schneider patent, if one were motivated to combine Keith II with the Schneider patent at all, the result would be a coaxial mouth-end filter segment, which is clearly incompatible with the teachings of Irby, Jr. and Smith. In other words, there would be no reasonable basis for combining a capsule with the coaxial filter of Schneider as the Schneider patent itself describes fine-tuning of the coaxial filter for the express purpose of changing the manner in which smoke flows through the filter depending on whether ventilation holes are covered or not. One of ordinary skill in the art would be disinclined to modify the coaxial filter with a capsule as such a major disruption in the filter structure would be expected to greatly impact the smoke flow characteristics, which are of paramount importance in Schneider. There would be no reasonable expectation of success upon making such a modification because it would likely frustrate the main purpose of using the coaxial filter. One of ordinary skill in the art would have no basis for concluding that the coaxial filter of Schneider would still function appropriately with regard to smoke flow characteristics if such a drastic design change is made. For at least this additional reason, Applicants respectfully request reconsideration and withdrawal of all rejections relying upon the Schneider patent.

It is believed that the claims, as amended, are even further distinguishable from the cited art. While Applicants do not acquiesce to the rejections of record of the claims in their original scope, in order to expedite prosecution, Applicants have amended the claims in a manner that is believed to provide even greater distinctions between the teachings of the cited art and the claimed invention.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

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